

IN THE CLAIMS

Please amend the claims as follows:

Claim 1-4 (Canceled).

Claim 5 (Currently Amended): A non-chemically crosslinked thermoplastic elastomer composition comprising as main components an ethylene- α -olefinic copolymer (1), a crystalline polyethylenic resin (2) and a block copolymer (3) ~~described below~~, wherein said crystalline polyethylenic resin (2) and said block copolymer (3) are in a three-dimensional network structure in a matrix comprising said ethylene- α -olefinic copolymer (1), ~~in which wherein~~ said block copolymer (3) comprises a crystalline ~~ethylene~~ polymeric block ~~and a block which is more compatible with said ethylene- α -olefinic copolymer (1) than with said crystalline polyethylenic resin (2).~~

Claim 6 (Currently Amended): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 5 wherein said block copolymer (3) has said crystalline ~~ethylene~~ polymeric blocks at its both ends.

Claim 7 (Currently Amended): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 5, wherein said block copolymer (3) is a polymer obtained by hydrogenating a block copolymer ~~whose blocks at its both ends are those represented by A shown below~~ having block A at both ends and whose intermediate block is that represented by B shown below block B between said block As,

wherein said block A is a butadiene polymeric block and said block B is a conjugated diene polymeric block and/or a vinyl aromatic compound-conjugated diene random copolymeric block,

~~and~~ wherein said block A is present in an amount of 5 to 90 % by mass and said block B is present in an amount of 10 to 95 % by mass based on 100 % by mass as the total of said

A and said B, and wherein the 1,2-vinyl group content in said block A is less than 25 % by mole and the 1,2-vinyl group content in said block B is not less than 25% by mole,

~~and~~ wherein at least 80 % of ~~the~~ all double bonds contained in said block copolymer (3) before the hydrogenation is saturated and,

wherein the number average molecular weight of said block copolymer (3) is 50,000 to 700,000,

~~in which:~~

~~A: a butadiene polymeric block having a 1,2-vinyl group content lower than that in B shown below; and~~

~~B: a conjugated diene polymeric block and/or a vinyl aromatic compound conjugated diene random copolymeric block having a 1,2-vinyl group content higher than that in A shown above.~~

Claim 8 (Currently Amended): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 7 comprising said ethylene- α -olefinic copolymer (1) in an amount of 10 to 94 % by mass, said crystalline polyethylenic resin (2) in an amount of 5 to 80 % by mass and a block copolymer (3) in an amount of 1 to 80 % by mass based on 100 % by mass as the total of said ethylene- α -olefinic copolymer (1), said crystalline polyethylenic resin (2) and said block copolymer (3).

Claim 9 (Currently Amended): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 7 comprising a mineral oil-based softening agent in an amount of 200 parts by mass or less based on 100 parts by mass as the total of said ethylene- α -olefinic copolymer (1), said crystalline polyethylenic resin (2) and said block copolymer (3).

Claim 10 (Canceled).

Claim 11 (Currently Amended): A foam whose main component is a thermoplastic elastomer composition comprising as main components an ethylene- α -olefinic copolymer (1) a crystalline polyethylenic resin (2) and a block copolymer (3) ~~described below~~, wherein said crystalline polyethylenic resin (2) and said block copolymer (3) are in a three-dimensional network structure in a matrix comprising said ethylene- α -olefinic copolymer (1),

~~in which~~ wherein said block copolymer (3) comprises a crystalline ~~ethylene~~ polymeric block ~~and a block which is more compatible with said ethylene- α -olefinic copolymer (1) than with said crystalline polyethylenic resin (2).~~

Claim 12 (Canceled).

Claim 13 (Currently Amended): A method for producing a foam comprising incorporating 0.01 to 20 parts by mass of a foaming agent to 100 parts by mass of a thermoplastic elastomer composition comprising as main components an ethylene- α -olefinic copolymer (1), a crystalline polyethylenic resin (2) and a block copolymer (3) ~~described below~~, wherein said crystalline polyethylenic resin (2) and said block copolymer (3) are in a three-dimensional network structure in a matrix comprising said ethylene- α -olefinic copolymer (1) followed by foaming,

~~in which~~ wherein said block copolymer (3) comprises a crystalline ~~ethylene~~ polymeric block ~~and a block which is more compatible with said ethylene- α -olefinic copolymer (1) than with said crystalline polyethylenic resin (2).~~

Claim 14 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 6, wherein said block copolymer (3) has a vinyl aromatic compound-conjugated diene random copolymeric block between said crystalline polymeric blocks.

Claim 15 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 7, wherein said block A is 1,3-butadiene polymeric block.

Claim 16 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 7, wherein the 1,2-vinyl group content in said block A is 20 % by mole or less.

Claim 17 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 7, wherein said block B is a polymeric block comprising a conjugated diene selected from the group consisting of 1,3-butadiene, isoprene, 2,3-dimethyl-1,3-butadiene, 1,3-pentadiene, 2-methyl-1,3-pentadiene, 1,3-hexadiene, 4,5-diethyl-1,3-octadiene, 3-butyl-1,3-octadiene and chloroprene of 50 % by mass or more.

Claim 18 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 5, wherein said ethylene- α -olefinic copolymer (1) is a ternary polymer containing a non-conjugated diene.

Claim 19 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 17, wherein said ternary polymer has an iodine value of 40 or less.

Claim 20 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 5, wherein said crystalline polyethylenic resin (2) has an insoluble of 10 % by mass or more when dissolved in boiling n-hexane.

Claim 21 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 5, wherein said crystalline polyethylenic resin (2) is at least one resin selected from the group consisting of polyethylene, ethylene-propylene copolymer having an ethylene content of 90 % by mole or more, ethylene-butene-1 copolymer having an ethylene content of 90 % by mole or more, ethylene-4-methyl-pentene-1 copolymer having an ethylene content of 90 % by mole or more, ethylene-hexene-1 copolymer having an ethylene content of 90 % by mole or more and ethylene-octene-1 copolymer having an ethylene content of 90 % by mole or more.

Claim 22 (New): A non-chemically crosslinked thermoplastic elastomer composition according to Claim 5, wherein said block copolymer (3) is a hydrogenated block polymer modified with at least one functional group selected from the group consisting of carboxyl group, acid anhydride group, hydroxyl group, epoxy group, halogen group, amino group, isocyanate group, sulfonyl group and sulfonate group.

Claim 23 (New): A foam according to Claim 11,
wherein said block copolymer (3) is a polymer obtained by hydrogenating a block copolymer having block A at both ends and block B between said block As,
wherein said block A is a butadiene polymeric block and said block B is a conjugated diene polymeric block and/or a vinyl aromatic compound-conjugated diene random copolymeric block,
wherein said block A is present in an amount of 5 to 90 % by mass and said block B is present in an amount of 10 to 95 % by mass based on 100 % by mass as the total of said A and said B, and wherein the 1,2-vinyl group content in said block A is less than 25 % by mole and the 1,2-vinyl group content in said block B is not less than 25 % by mole,
wherein at least 80 % of all double bonds contained in said block copolymer (3) before the hydrogenation is saturated and,
wherein the number average molecular weight of said block copolymer (3) is 50,000 to 700,000.

Claim 24 (New): A method for producing a foam according to Claim 13, wherein said block copolymer (3) is a polymer obtained by hydrogenating a block copolymer having block A at both ends and block B between said block As,
wherein said block A is a butadiene polymeric block and said block B is a conjugated diene polymeric block and/or a vinyl aromatic compound-conjugated diene random copolymeric block,

wherein said block A is present in an amount of 5 to 90 % by mass and said block B is present in an amount of 10 to 95 % by mass based on 100 % by mass as the total of said A and said B, and wherein the 1,2-vinyl group content in said block A is less than 25 % by mole and the 1,2-vinyl group content in said block B is not less than 25 % by mole,

wherein at least 80 % of all double bonds contained in said block copolymer (3) before the hydrogenation is saturated and,

wherein the number average molecular weight of said block copolymer (3) is 50,000 to 700,000.

Claim 25 (New): A foam according to Claim 11, wherein the thermoplastic elastomer composition is non-chemically crosslinked.

Claim 26 (New): A method according to Claim 13, wherein the thermoplastic elastomer composition is non-chemically crosslinked.

DISCUSSION OF THE AMENDMENT

The specification has been amended by deleting reference to claim numbers. In addition, the specification has been amended at page 7, line 7ff by deleting the term "ethylenic" from "crystalline ethylenic block" because the original term was and is not intended to encompass blocks derived from only ethylene. For example, disclosed are such blocks derived from hydrogenating butadiene, in the specification beginning at page 7, line 21. This paragraph has been further amended to clarify that blocks, not (co)polymers, are being described.

Claims 1-4, 10 and 12 have been canceled. Claim 5 has been amended to recite that the thermoplastic elastomer composition is --non-chemically crosslinked--, as supported in the specification at, for example, page 1, lines 9-10, and page 3, lines 16-17 and 22-23. Claim 5 has been further amended by reciting block copolymer (3) as one that comprises a crystalline polymeric block, consistent with the above-discussed amendment in the specification. The dependent claims have been amended accordingly. Claim 7 has been rearranged and superfluous matter deleted. Claims 11 and 13 have been amended analogously to the above-discussed "further" amendment of Claim 5.

New Claims 14-26 have been added. Claim 14 is supported by Claim 7. Claims 25 and 26 are in the specification at, for example, page 1, lines 9-10, and page 3, lines 16-17 and 22-23. Claims 15-24 are supported in the specification as follows: Claim 14 is supported at Claim 15 is supported at page 9, lines 6-7. Claim 16 is supported at page 9, line 10. Claim 17 is supported in the paragraph bridging pages 9 and 10. Claim 18 is supported by original Claim 2. Claim 19 is supported by original Claim 3. Claim 20 is supported by original Claim 4. Claim 21 is supported in the specification at the paragraph bridging pages 5 and 6 and the paragraph following. Claim 22 is supported at page 12, lines 17-23. Claim 23 is supported by Claims 11 and 7. Claim 24 is supported by Claims 13 and 7.

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No new matter has been added by the above amendment. Claims 5-9, 11, and 13-26 are now pending in the application.